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**WOOL GROWERS—RANGE OWNERS
RANGE ADMINISTRATORS**

Should Work Together to

STOP SHEEP LOSSES

FROM

POISONOUS ORANGE SNEEZEWEED



U. S. **FOREST SERVICE**
UNITED STATES DEPARTMENT OF AGRICULTURE

WASHINGTON, D. C. - 1940



ORANGE SNEEZEWEED (*HELENium HOOPESII*)

A Persistent and Aggressive Pest

Orange sneezeweed, also called Hoopes sneezeweed, western sneezeweed, owls-claws, sunflower, and yellowweed, is a perennial plant poisonous to livestock. Orange sneezeweed occurs to some extent in most of the mountain ranges in eastern Oregon and southern Idaho and south to New Mexico and California. It grows most abundantly in Colorado, Utah, northern New Mexico, and the Sierra Nevada of California, between altitudes of 7,000 to 11,000 feet, on the loamy soils of parks, mountain meadows, aspen stands, and open timber.

Flowering plants of sneezeweed bear leafy stems which grow 2 to 3 feet high and produce one to many (usually three) sunflower-like heads. These heads are 2 to 3 inches wide and have brownish centers and orange-yellow "petals." The plants which do not flower have no stem and consist of clusters of several narrow, bright-green leaves from 4 to 8 inches long or longer. Sneezeweed is highly persistent in maintaining itself and is aggressive in spreading to new areas. It produces many seeds, forms new shoots each fall on the old root crowns, and is able to withstand heavy frosts. Many plants remain green all winter under snow and start growth in spring as soon as snow melts. Sneezeweed is particularly likely to increase on the range where the vigor of grasses or other forage plants has been reduced by too close grazing.

Responsible for Heavy Sheep Losses.

Although sneezeweed is poisonous to all kinds of livestock, sheep are the only class that graze it sufficiently to cause heavy losses. If the sheep eat enough of the sneezeweed they will soon die; otherwise they may linger for months or years in poor condition, and ewes in such condition will produce poor lamb crops and sickly or inferior lambs. Losses, particularly in Colorado and Utah, have reached such proportions that on some badly infested ranges sheep raising is no longer profitable. Of particular concern to wool growers in the West is the fact that sneezeweed is increasing

and spreading to heretofore uninfested ranges.

Sneezeweed causes what is commonly called "spewing sickness." The prominent symptoms are nausea, chronic vomiting, depression, salivation, stiffness, and extreme weakness. Death is not accompanied by convulsions but comes rather quietly after a period of low vitality and starvation. All parts of the plant are poisonous throughout the season. Feeding tests have shown that an average, healthy 100-pound animal must eat about 4 pounds of sneezeweed herbage in one day, about 3 pounds each day for several days, or more than 2 pounds each day for 3 weeks, before the effects of poisoning become evident. However, some individuals require more and some less than these quantities, and some may die immediately while others live for indefinite periods. Symptoms of poisoning may not be apparent in most animals if somewhat less than 1½ pounds of sneezeweed is consumed each day.

Poisonous Effect is Cumulative.

It has been commonly observed that when a band of sheep is introduced to a sneezeweed range, comparatively few cases of poisoning occur the first year, more the second, and still more the third. Apparently the effects of poisoning are cumulative and persistent. Although some sheep seem to recover from the initial effects of sneezeweed poison, they are never quite normal again. Many sheep die on the winter range from sneezeweed poisoning contracted the previous summer.

Eradicate Plants by Grubbing.

Grubbing seems to be the best method at present of eradicating sneezeweed. It should be accompanied by seeding of grasses, to provide forage and a protective soil cover. Seeds of sod-forming grasses, such as Kentucky bluegrass, Canada bluegrass, and smooth brome should be sown on the sneezeweed-infested range in May or June, or in the fall at the end of the growing season, depending on the locality, at the rate of 8 to 10 pounds per acre. Grubbing should start immediately. All bare spots that are not grubbed should be raked to cover the seed. In grubbing, it is essential that all of the sneezeweed taproot be removed from the soil. For complete eradication it may be necessary to regrab 2 or 3 years in succession. Grubbing ordinarily should be limited to relatively small areas.

How to Reduce Sheep Losses on the Range.

Losses can be greatly decreased by special management of herds that graze infested ranges. The band should be managed so that sheep will not eat enough sneezeweed to be poisoned—that is, not more than 1 to 1½ pounds per day for an average animal. Some of the most important management practices to safeguard losses are:

1. Bed the sheep out at a different place each night.
2. Do not bed near badly infested areas.
3. Do not graze infested areas in early spring.
4. Do not graze infested areas in fall when forage plants are dry.
5. Do not graze infested areas when sheep are hungry.
6. When necessary to use badly infested areas, they should be grazed lightly, and no part of the range should be grazed excessively.
7. Herd the band quietly, openly, and allow normal grazing.
8. See that the sheep always have an ample supply of good forage.
9. Carefully cull the herd.

Cooperative Effort Essential.

Effective control of sneezeweed and decreased losses from poisoning demand the full and active cooperation of all concerned. On the national forests, wool growers can best cooperate with the Forest Service by not grazing their allotments too closely and by following the above management practices on sneezeweed-infested ranges. Small areas infested with sneezeweed should be grubbed or reported to the Forest Ranger.

[illegible]

